

INTERNATIONAL SEARCH REPORT

Intern'l Application No
PCT/BR2005/000044

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 F25D17/06 F25D17/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 F25D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 488 412 A (WEAVER ET AL) 18 December 1984 (1984-12-18) abstract; figures 1-3 column 2, line 61 - column 6, line 23	1,6,9,14
Y	US 3 050 955 A (JR. DOUGLAS A. SOLLEY, ET AL) 28 August 1962 (1962-08-28) figures 1,4 column 3, line 17 - line 32	3-5,7,8
Y	GB 2 372 309 A (* WORKS DESIGN LIMITED; * CUCUMBER LIMITED) 21 August 2002 (2002-08-21) abstract; figures 1-6	3-5
A		1
Y		7,8
A		1
		-/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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Date of the actual completion of the international search

19 August 2005

Date of mailing of the international search report

29/08/2005

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 671 078 A (PINK ET AL) 9 June 1987 (1987-06-09) abstract; figures 1-6 column 6, line 1 - line 38	1,6,9
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 24, 11 May 2001 (2001-05-11) -& JP 2001 201234 A (FUJITSU GENERAL LTD), 27 July 2001 (2001-07-27) abstract; figures 3,4	1
A	US 2 165 480 A (HASTINGS ROGER W) 11 July 1939 (1939-07-11) figure page 1, column 1, line 11 - line 16	1
A	US 6 412 286 B1 (PARK RAE-EUN ET AL) 2 July 2002 (2002-07-02) abstract; figures 1,2	1
A	FR 2 022 428 A (BOSCH) 31 July 1970 (1970-07-31) figure	1,3-5
A	US 5 551 252 A (LEE ET AL) 3 September 1996 (1996-09-03) abstract; figure 3	1,9
A	US 2003/037565 A1 (KIM SANG BAE ET AL) 27 February 2003 (2003-02-27) abstract; figure 12	1,9

INTERNATIONAL SEARCH REPORT

Information on patent family members

Inten	ial Application No
PCT/BR2005/000044	

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 4488412	A	18-12-1984		AU 567762 B2 AU 3365384 A BR 8405438 A CA 1227348 A1 GB 2149899 A ,B JP 1493899 C JP 60114677 A JP 63042189 B SG 37787 G		03-12-1987 23-05-1985 03-09-1985 29-09-1987 19-06-1985 20-04-1989 21-06-1985 22-08-1988 24-07-1987
US 3050955	A	28-08-1962		NONE		
GB 2372309	A	21-08-2002		NONE		
US 4671078	A	09-06-1987		CA 1268515 A1		01-05-1990
JP 2001201234	A	27-07-2001		NONE		
US 2165480	A	11-07-1939		NONE		
US 6412286	B1	02-07-2002		KR 2002082944 A EP 1253387 A1 JP 2002323281 A		01-11-2002 30-10-2002 08-11-2002
FR 2022428	A	31-07-1970		DE 1806565 A1 AT 287033 B FR 2022428 A7		21-05-1970 11-01-1971 31-07-1970
US 5551252	A	03-09-1996		KR 133019 B1 JP 2771125 B2 JP 7218091 A		21-04-1998 02-07-1998 18-08-1995
US 2003037565	A1	27-02-2003		KR 2003016754 A KR 2003016755 A KR 2003016756 A KR 2003018830 A KR 2003020077 A AU 9744701 A CA 2365751 A1 CN 1401958 A ,C DE 10203082 A1 GB 2379004 A JP 3665292 B2 JP 2003065650 A MX PA02000931 A		03-03-2003 03-03-2003 03-03-2003 06-03-2003 08-03-2003 27-02-2003 21-02-2003 12-03-2003 20-03-2003 26-02-2003 29-06-2005 05-03-2003 20-08-2003